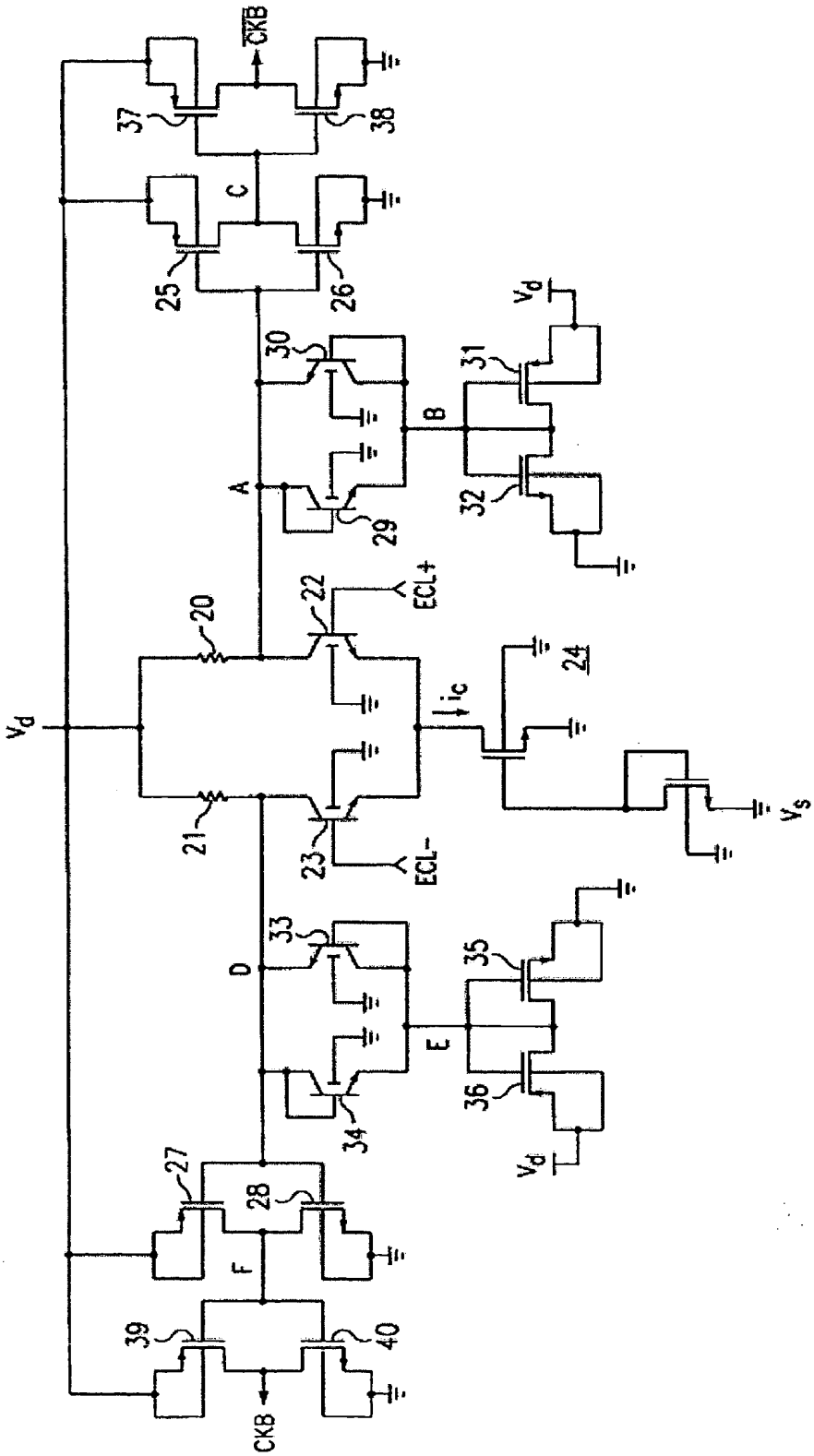
CKB
37
38
C
25
26
30
31
V_d
B
A
29
32
20
22
ECL+
V_d
i_c
24
21
23
ECL-
V_s
D
33
35
E
34
36
V_d
27
28
F
39
40
CKB

Fig 1

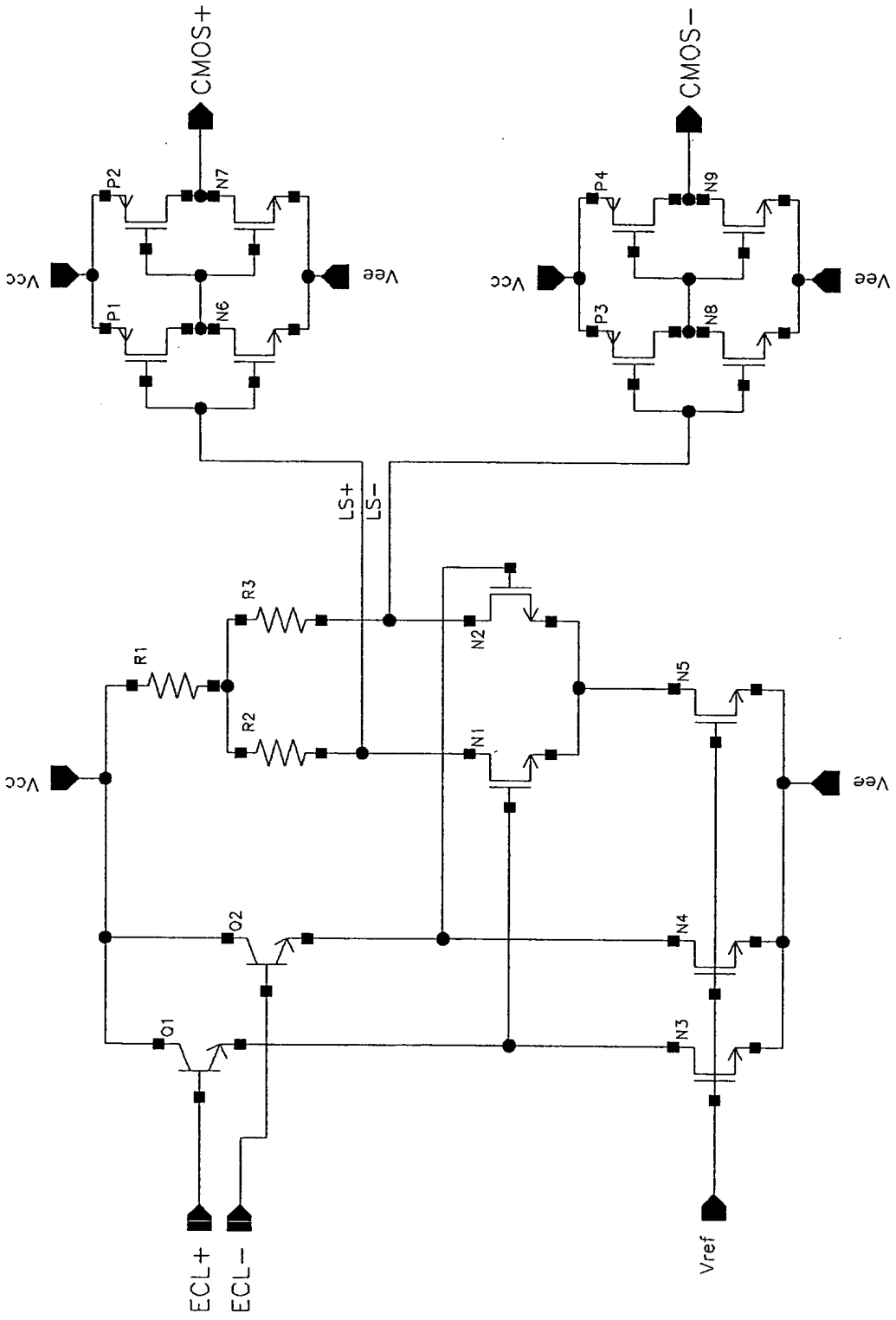
CMOS+
CMOS−
P2
N7
P1
N6
P4
N9
P3
N8
Vcc
Vee
LS+
LS−
R1
R2
R3
N1
N2
N5
N4
N3
Q1
Q2
ECL+
ECL−
Vref

Fig 2

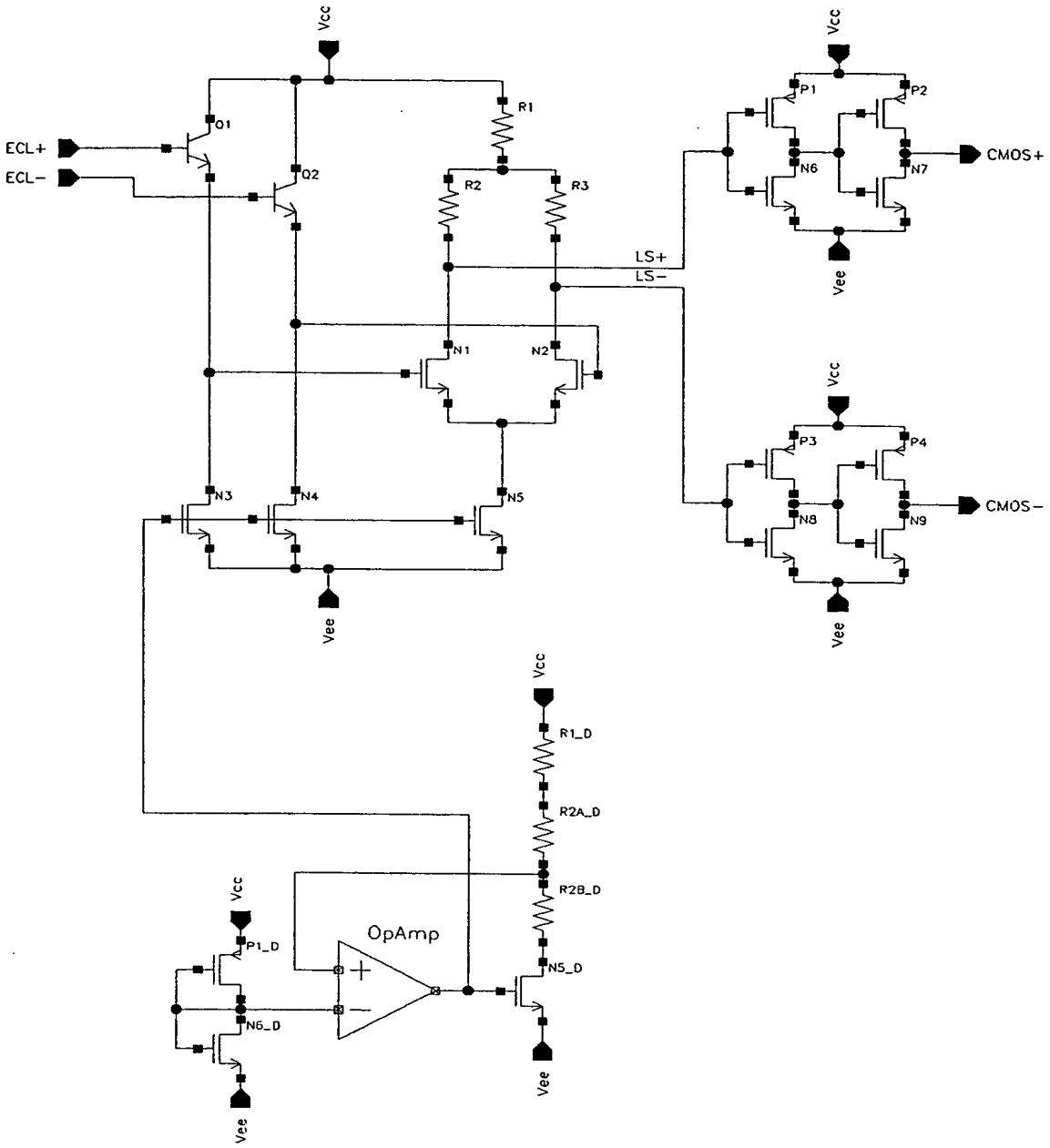
Vcc
ECL+
ECL−
Q1
Q2
R1
R2
R3
LS+
LS−
N1
N2
N3
N4
N5
Vee
P1
P2
N6
N7
CMOS+
P3
P4
N8
N9
CMOS−
R1_D
R2A_D
R2B_D
OpAmp
P1_D
N6_D
N5_D

FIG 3

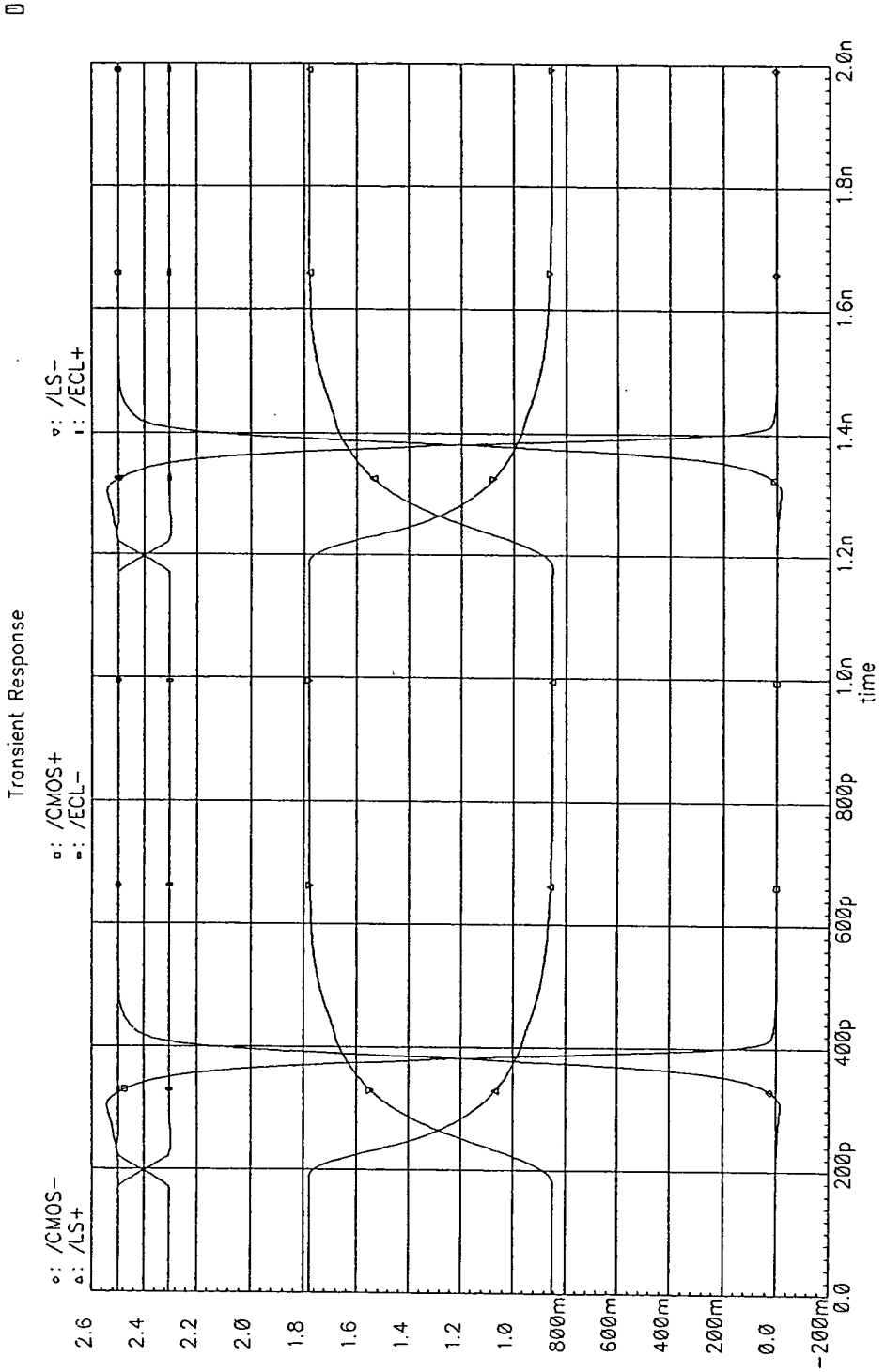
Transient Response
o: /CMOS-
a: /LS+
a: /CMOS+
=: /ECL-
v: /LS-
=: /ECL+
2.6
2.4
2.2
2.0
1.8
1.6
1.4
1.2
1.0
800m
600m
400m
200m
0.0
-200m
0.0
200p
400p
600p
800p
1.0n
1.2n
1.4n
1.6n
1.8n
2.0n
time

FIG 4